WHAT IS CLAIMED IS:

1. A switch illuminating EL (electroluminescence) sheet having a light emitting pattern corresponding to a switch, comprising:

a light emitting layer having EL phosphor particles which are contained dispersedly in a dielectric matrix;

a transparent electrode layer arranged along a light emitting face of the light emitting layer and constituted of a conductive polymer;

a transparent protection film arranged on the transparent electrode layer and having a thickness of 10 μm to 60 μm; and

a dielectric layer and a back electrode layer which are arranged in order along a non light emitting face of the light emitting layer.

2. The switch illuminating EL sheet according to claim 1, wherein the EL phosphor particles are constituted of ZnS-based EL phosphors.

3. The switch illuminating EL sheet according to claim 2, wherein the EL phosphor particles have a mean particle diameter of 10 μm to 23 μm and a particle distribution including 30% or less by mass of constituents having a particle diameter of 25.4 μm or larger.

4. The switch illuminating EL sheet according to claim 3, wherein the EL phosphor particle has luminance of 80 cd/m^2 or higher under drive conditions of a voltage of 100 V and a frequency of 400 Hz when an EL element is produced using a transparent electrode having light transmittance of 85% or higher and surface resistance of 500 Ω/□ or lower.

5. The switch illuminating EL sheet according to claim 1,

wherein the EL phosphor particles have a damp-proof coating formed on a surface thereof.

6. The switch illuminating EL sheet according to claim 5, wherein the damp-proof coating is constituted of a metal oxide film or a metal nitride film.

7. The switch illuminating EL sheet according to claim 5, wherein the damp-proof coating has a mean film thickness of 0.1 μm to 2 μm.

8. The switch illuminating EL sheet according to claim 3, wherein the switch illuminating EL sheet exhibits luminance of 50 cd/m^2 or higher under drive conditions of a voltage of 100 V and a frequency of 400 Hz.

9. The switch illuminating EL sheet according to claim 1, wherein the transparent electrode layer constituted of the conductive polymer has a mean thickness of 0.1 μm or larger, and surface resistance of 1000 Ω/□ or lower and light transmittance of less than 80%.

10. The switch illuminating EL sheet according to claim 1, further comprising:

a back insulation layer arranged on the back electrode layer.

11. An illuminated switch comprising a switch illuminating EL sheet according to claim 1.

12. The illuminated switch according to claim 11, comprising:

a switch mechanism portion;

a key top portion which operates the switch mechanism portion; and

the switch illuminating EL sheet arranged between the switch

mechanism portion and the key top portion, and illuminating the key top portion.

13. The illuminated switch according to claim 12, wherein the switch mechanism portion has a dome type movable contact point and a fixed point arranged on a substrate.

14. An electronic apparatus comprising an illuminated switch according to claim 11.

15. The electronic apparatus according to claim 14, wherein the electronic apparatus is a mobile communication apparatus.